



Level



Pressure



Flow



Temperature



Liquid
Analysis



Registration



Systems
Components



Services



Solutions

Operating Instructions

Analog Transmitter AT1000 AT1

Alarm transmitter for mechanical level gauges

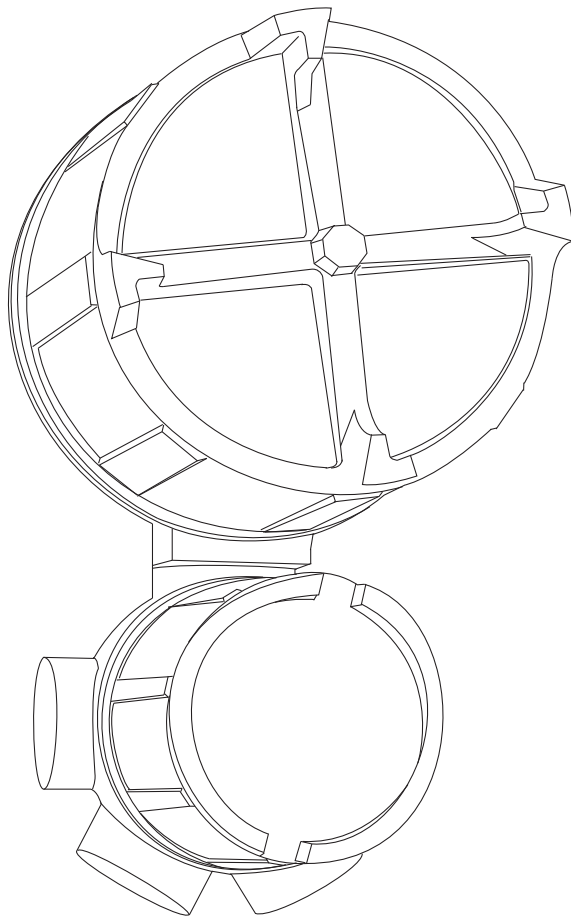


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1 Safety instructions

1.1 Designated use

Analog transmitter AT1 is designed to be installed onto LT and LTC series level gauging systems. The device transmits the level information into electric current, voltage, and resistance signals. Also it could be equipped with maximum of 6 alarm contact signals.

Along with the level transmission, contact signals can be received by this transmitter alone. Thus, the valve and pump can easily be controlled.

1.2 Installation, commissioning and operation

- Mounting, electrical installation, start-up and maintenance of the instrument may only be carried out by trained personnel authorized by the operator of the facility.
- Personnel must absolutely and without fail read and understand these installation instructions before carrying out the procedures..
- The instrument may only be operated by personnel who are authorized and trained by the operator of the facility. All instructions in this manual are to be observed without fail.
- The installer must make sure that the measuring system is correctly wired according to the wiring diagrams. The measuring system is to be grounded.
- Please observe all provisions valid for your country and pertaining to the opening and repairing of electrical devices.

1.3 Operational safety

1.3.1 Hazardous areas

Measuring systems for use in hazardous environments are accompanied by separate "Ex documentation", which is an integral part of this Operating Manual. Strict compliance with the installation instructions and ratings as stated in this supplementary documentation is mandatory.

- Ensure that all personnel are suitably qualified.
- Observe the specifications in the certificate as per national and local regulations.



Caution!

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

1.4 Notes on safety conventions and symbols

In order to highlight safety-relevant or alternative operating procedures in the manual, the following conventions have been used, each indicated by a corresponding symbol in the margin.

Safety conventions

Symbol	Meaning
	Warning! A warning highlights actions or procedures which, if not performed correctly, will lead to personal injury, a safety hazard or destruction of the instrument.
	Caution! Caution highlights actions or procedures which, if not performed correctly, may lead to personal injury or incorrect functioning of the instruments.
	Note! A note highlights actions or procedures which, if not performed correctly, may indirectly affect operation or may lead to an instrument response which is not planned.
	Device certified for use in explosion hazardous area If the device has this symbol embossed on its name plate it can be installed in an explosion hazardous area.
	Explosion hazardous area Symbol used in drawings to indicate explosion hazardous area. - Devices located in and wiring entering areas with the designation "explosion hazardous areas" must conform with the stated type of protection.
	Safe area (non-explosion hazardous area) Symbol used in drawings to indicate, if necessary, non-explosion hazardous areas. - Devices located in safe areas still require a certificate if their outputs run into explosion hazardous areas.
	Direct voltage A terminal to which or from which a direct current or voltage may be applied or supplied
	Alternating voltage A terminal to which or from which an alternating (sine-wave) current or voltage may be applied or supplied
	Grounded terminal A grounded terminal, which as far as the operator is concerned, is already grounded by means of an earth grounding system.
	Protective grounded (earth) terminal A terminal which must be connected to earth ground prior to making any other connection to the equipment.
	Equipotential connection (earth bonding) A connection made to the plant grounding system which may be of type e.g. neutral star or equipotential line according to national or company practice

2 Identification

2.1 Device designation

2.1.1 Nameplate

The follow technical data are given on the instrument nameplate:

Endress+Hauser 

液面計発信器/Transmitter

Order code

Serial no.

Range 0 ~ m

防爆型式 / Ex proof model :

防爆構造 / Protection class :

規格 / Rating

電源 / Power

出力 / Output DC

接点出力 / Contact output

(1接点容量/1 contact)

周囲温度 / Ambient temp.: -10 °C ~ +40 °C

警告 : 通電状態では蓋を開けないでください。
Warning: Do not open the cover when energized. IP65

エンドレスハウザー山梨株式会社 Yamanashi 406-0846
Endress+Hauser Yamanashi Co.,Ltd. Made in Japan

NP-1552-7

①	Order cord
②	Serial number
③	Measuring range
④	Explosion model
⑤	Protection class
⑥	Power
⑦	Output
⑧	Analog output
⑨	Contact output
⑩	Contact output

TIIS approval type

2.2 Ordering information

010	Output:			
	1	4 - 20mA		
	2	10 - 50mA		
	3	0 - 1mA		
	4	0 - 20mA		
	5	0 - 10mVDC		
	6	0 - 1VDC		
	9	Special version, TSP-no. to be spec.		
020	Power Type:			
	1	AC		
	2	DC		
030	Alarm Output:			
	0	Not used		
	2	2 - point		
	4	4 - point		
	6	6 - point		
040	Approval:			
	B	Flame proof d2G4, TIIS + cable gland		
	E	Flame proof d2G4, TIIS		
	W	Weather proof IP65		
	Y	Special version, TSP-no. to be spec.		
050	Function:			
	0	Basic version		
	9	Special version, TSP-no. to be spec.		
060	Power Supply:			
	1	100VAC, 50/60Hz		
	2	110VAC, 50/60Hz		
	3	200VAC, 50/60Hz		
	4	220VAC, 50/60Hz		
	5	24VDC		
	9	Special version, TSP-no. to be spec.		
070	Cable Entry:			
	A	1 x thread PF (G) 3/4		
	B	2 x thread PF (G) 3/4		
	C	1 x thread PF (G) 1-1/2		
	D	1 x thread PF (G) 1-1/2, 1x PF (G) 3/4		
	E	1 x gland PF (G) 3/4, TF16-11		
	F	2 x gland PF (G)3/4, TF16-11		
	G	1 x gland PF (G) 1, TF22-15		
	H	1 x thread NPT1		
	K	1 x thread M25		
	M	1 x gland PF (G) 1-1/4, TF28-20,1x gland PF (G) 3/4, TF16-11		
	Q	1 xthread NPT 3/4		
	R	2 xthread NPT3/4		
	Y	Special version, TSP-no. to be spec.		
080	Installation Gauge:			
	1	LT1100/LT1200/LT3100/LT3200 R:300mm low pressure LT version		
	2	LT1400/LT1600/LT3400/LT3600 R:300mm high pressure LT version		
	3	LTC2100 L:600mm		
	4	LTC2230/LTC2240 R:600mm		
	9	Special version, TSP-no. to be spec.		

090											Measuring Range: A 1.5m 1 2.5m C 3m D 3.5m E 4m 2 5m F 6m G 8m 3 10m H 12m J 14m 4 16m 5 20m K 25m 6 30m 9 Special version, TSP-no. to be spec.
100											Alarm Contact: 0 Not used 1 A = normal 2 B = normal closed 3 C = transfer contact
110											Colour: 0 Silver 9 Special version, TSP-no. to be spec.
AT1-											Complete product designation

2.3 Scope of delivery

Caution!

It is essential to follow the instructions concerning the unpacking, transport and storage of measuring instruments given in the chapter "Incoming acceptance, transport, storage".

The scope of delivery consists of:

- Assembled instrument

Accompanying documentation:

- Operating manual (this manual)

2.4 Registered trademarks

HART®

Registered trademark of HART Communication Foundation, Austin, USA

3 Installation

3.1 Incoming acceptance, transport, storage

3.1.1 Incoming acceptance

Check the packing and contents for any signs of damage.

Check the shipment, make sure nothing is missing and that the scope of supply matches your order.

3.1.2 Transport



Caution!

Follow the safety instructions and transport conditions for instruments of more than 18kg. Do not lift the measuring instrument by its housing in order to transport it.

3.1.3 Storage

Pack the measuring instrument so that is protected against impacts for storage and transport. The original packing material provides the optimum protection for this.

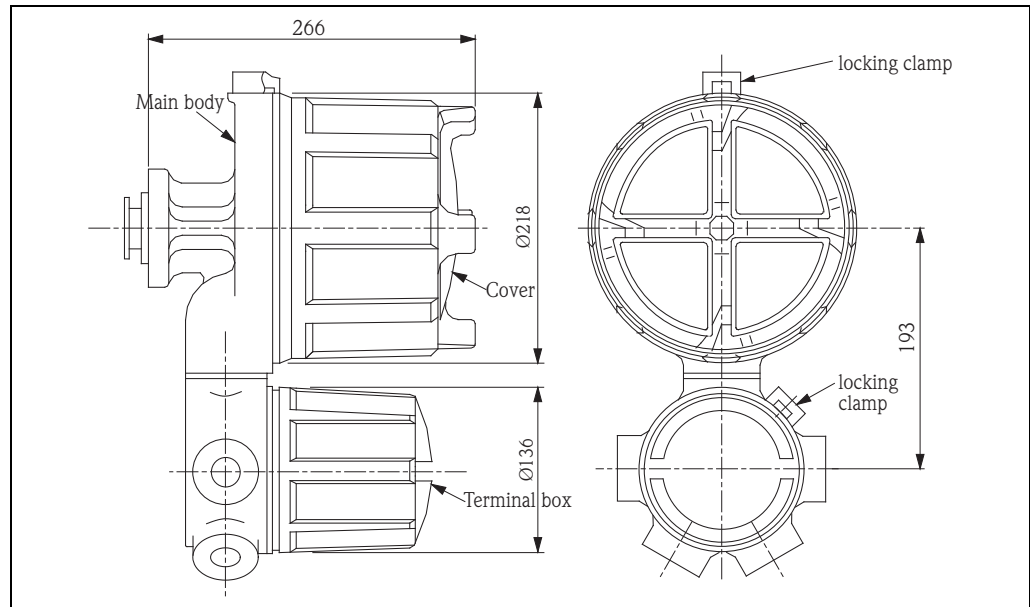
The permissible storage temperature is $-20^{\circ}\text{C} \dots +60^{\circ}\text{C}$ ($-4^{\circ}\text{F} \dots +140^{\circ}\text{F}$)

3.2 Installation conditions

3.2.1 Dimensions

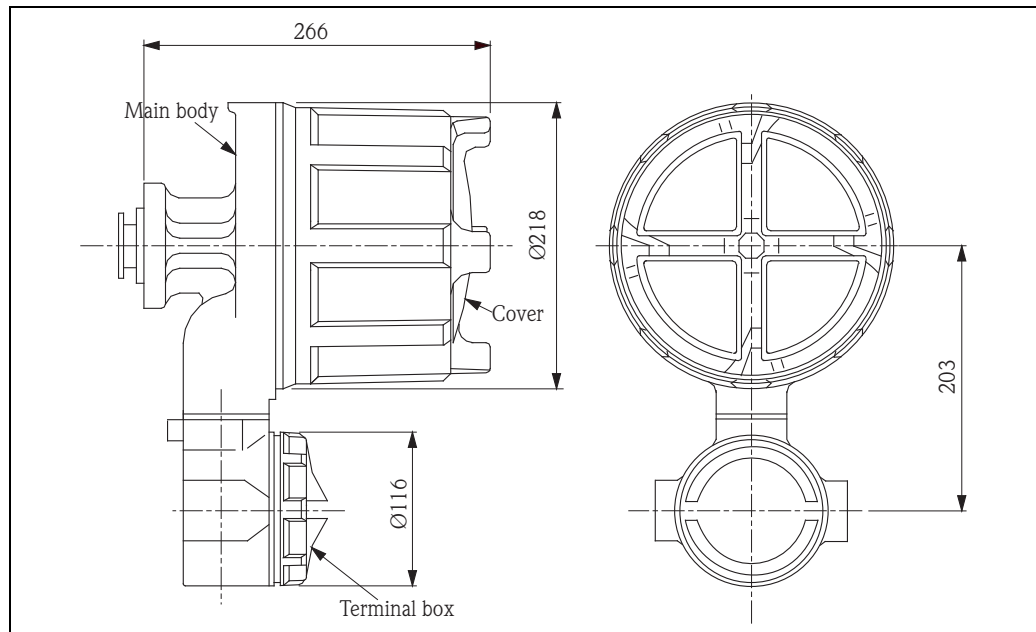
Flame proof type

Alarm output: 0, 2, 4, 6 points

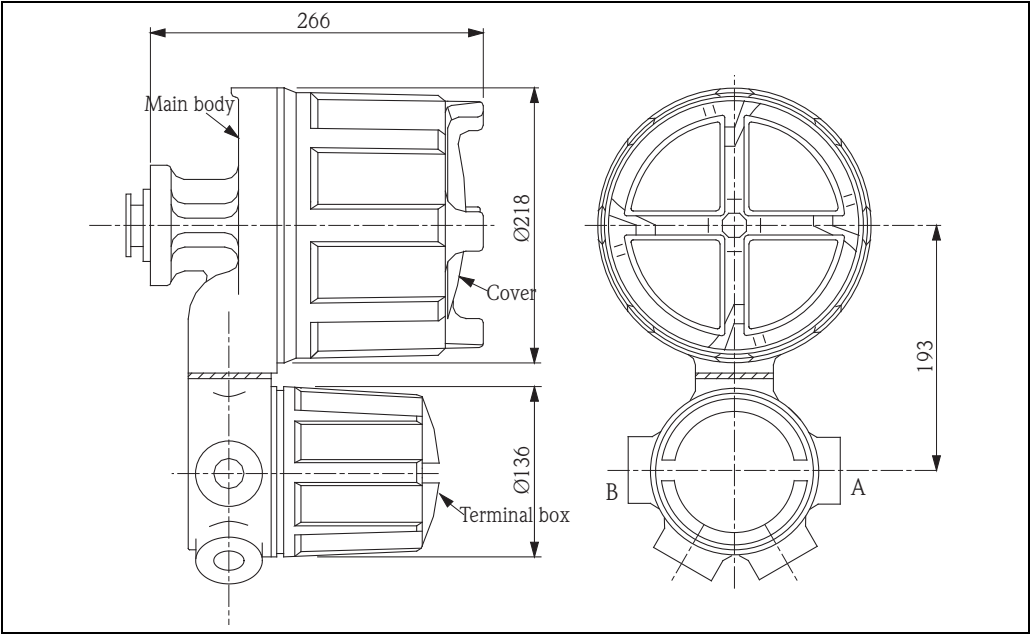


Weather proof

Alarm output: 0, 2 points, In case of Cable Entry PF(G)3/4,NPT3/4



Alarm output: 0, 2, 4, 6 points



Cable Entry

070:Cable Entory	A	B
A	thread PF(G)3/4	
B	thread PF(G)3/4	thread PF(G)3/4
C	thread PF(G)1-1/2	
D	thread PF(G)1-1/2	thread PF(G)3/4
E	gland (G)3/4 TF16-11	
F	gland PF(G)3/4 TF16-11	gland PF(G)3/4 TF16-11
G	gland PF(G)1 TF22-15	
H	thread NPT1	
K	thread M25	
M	gland PF(G)1-1/4 TF28-20	gland PF(G)3/4 TF16-11
Q	thread NPT3/4	
R	thread NPT3/4	thread NPT3/4

3.3 Installation with Level gauge

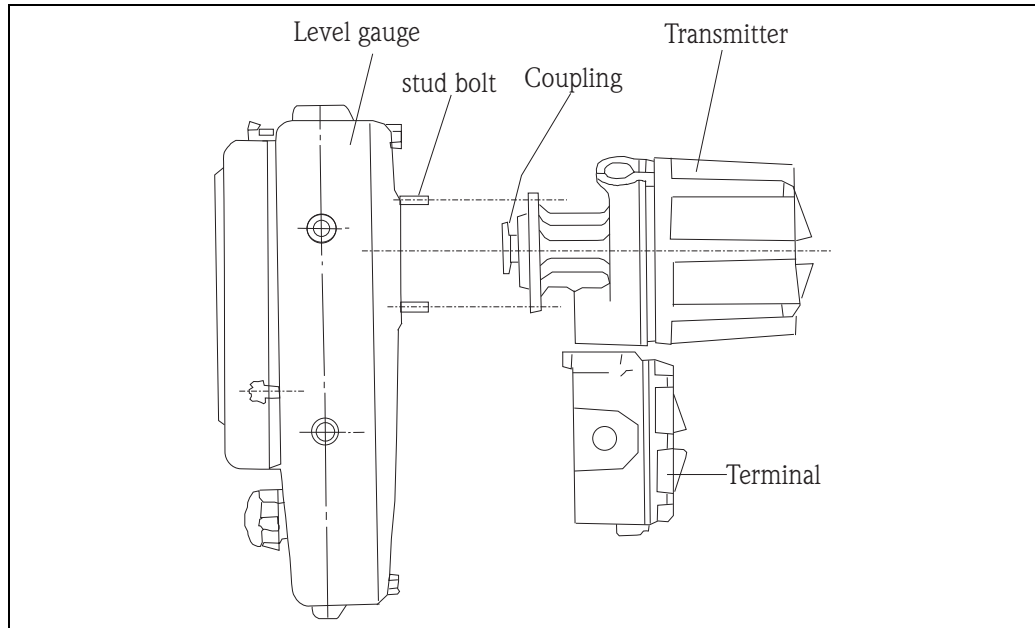
Attach the stud bolt, nut, washer, and coupling as shown in the diagram.

1. Take out the blind plate attached to back of level gauge
2. Screw the stud bolts on the back of the level gauge as shown in the diagram.
(the side with the shorter screw is the level gauge side)



Note!

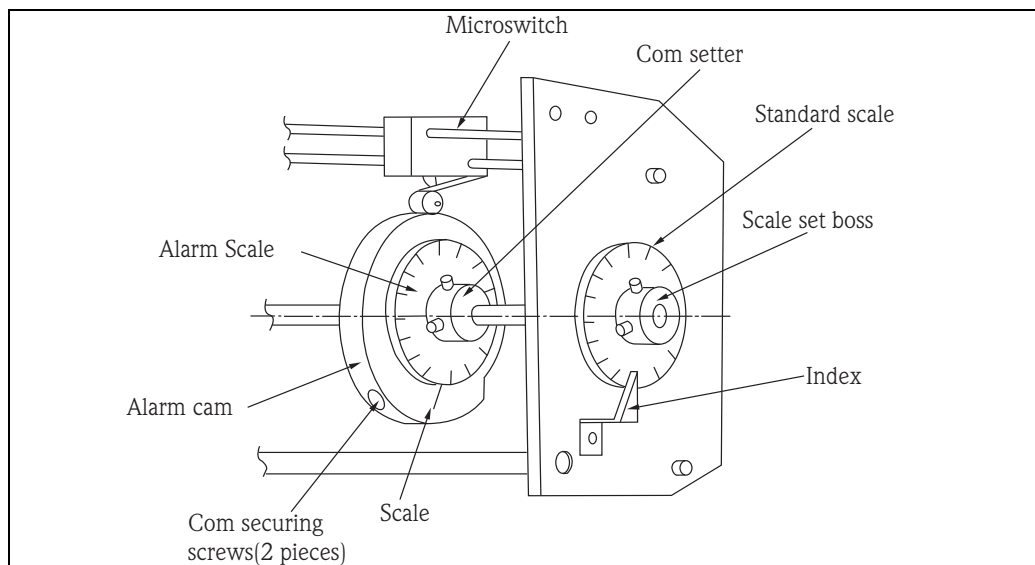
Terminal box is available in any direction, but it is preferable to install in sideways.



3. Insert the coupling in the core nozzle of the transmitter and tighten the coupling into the transmitter using the toothed lock washer and nut.

Multiple - alarm point model

- Remove the cover. Loosen the stopper screw at the alarm cam, then set the red guideline onto the desired alarm point on the scale and secure it with the screw. Repeat this step in order to set each cam.
- When the setting of cam has all finished, set the level on the standard scale by rotating the coupling to match the level setting on the level gauge. Then, close the cover and install it onto the level gauge.



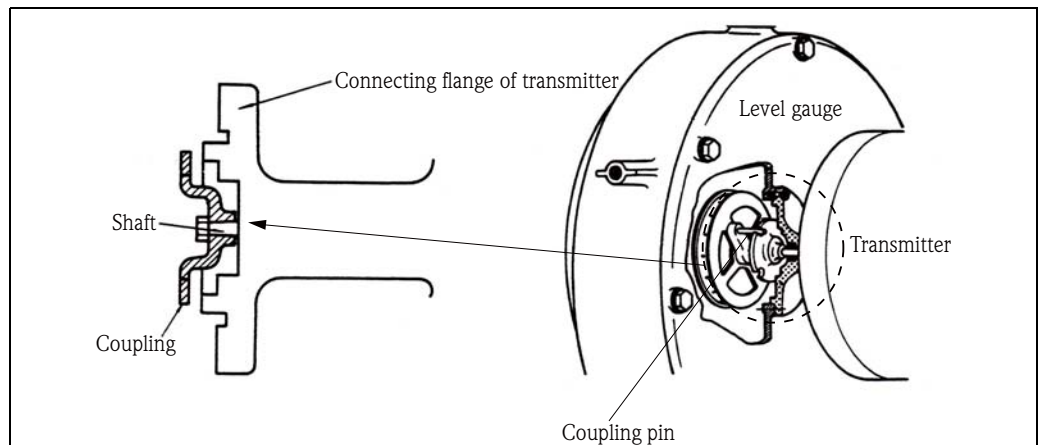
Alarm contact non equipped model

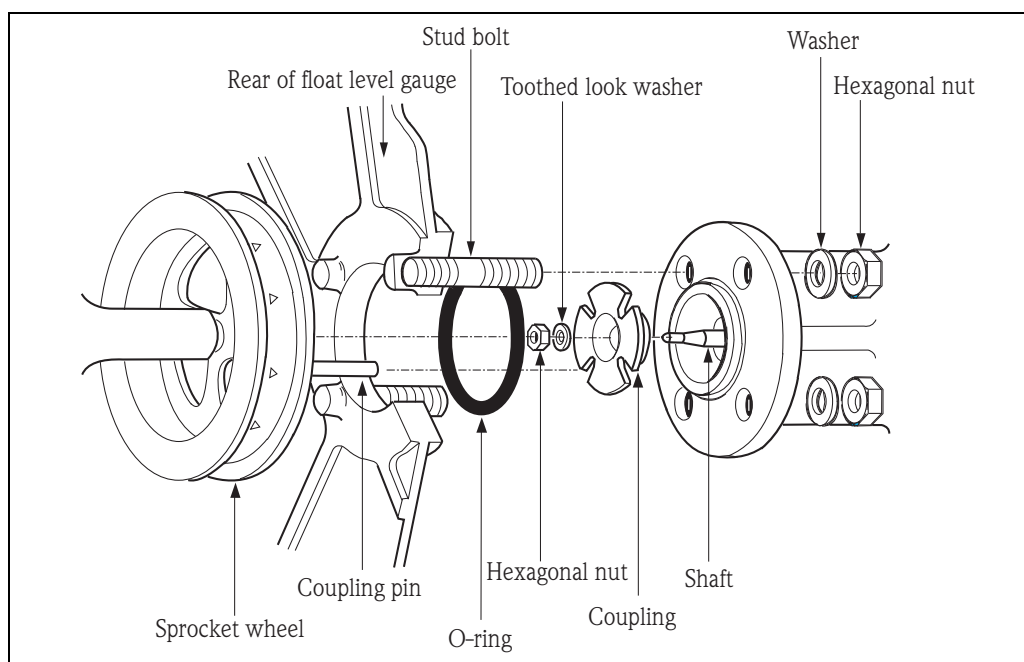
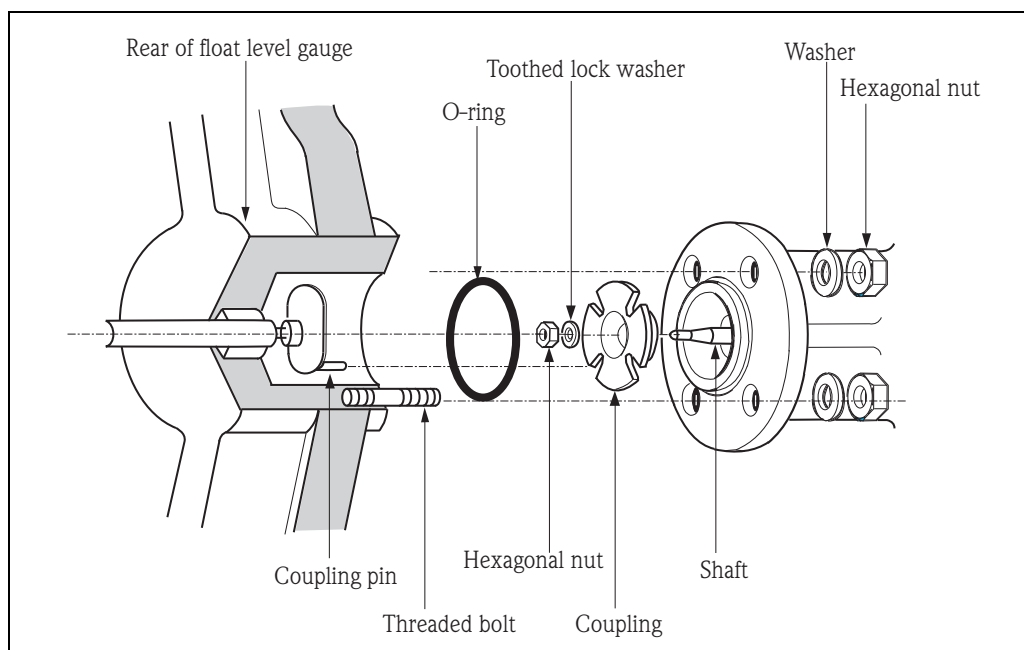
- Remove the cover for the transmitter. Next, rotate the coupling in order to adjust the set level of the potentiometer (or the alarm) to correspond to the set level of the level gauge. Close the main body cover.
4. Attach the transmitter and the level gauge by connecting coupling gap on the transmitter and the coupling pin on the level gauge. If the coupling's gap and the pin do not meet perfectly, the transmitter and the level gauge cannot be connected.

**Note!**

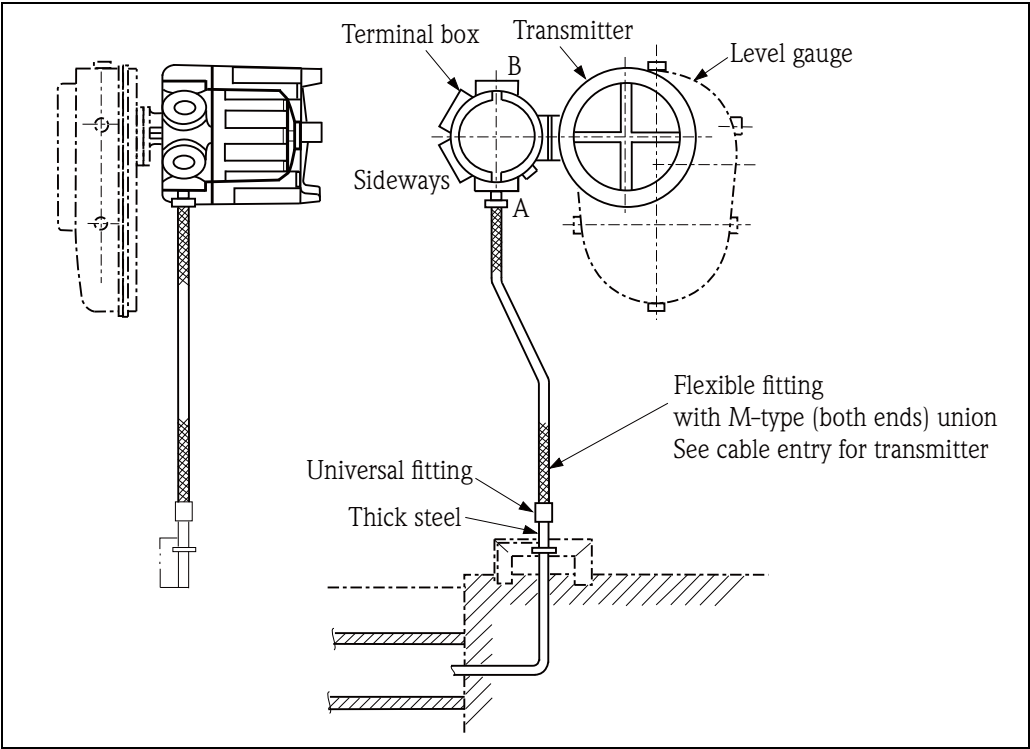
If the connection does not go smoothly, check to make sure that you are connecting the correct points (coupling gap and pin) on both sides of the device.

If you press the transmitter and the level gauge too firmly against each other, you might break the main shaft and the device will no longer be good for use.



Installation with Low pressure (LT11/12/31/32)**Installation with Medium and high pressure (LT14/16/34/36)**

3.3.1 Tank installation with Float Tank Gauge

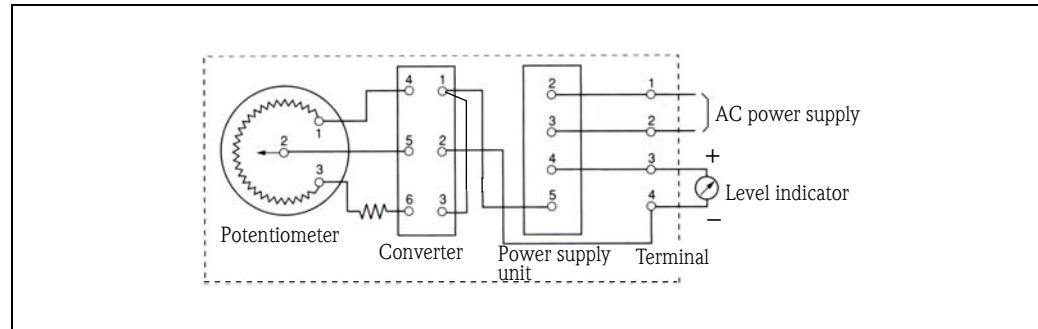


4 Wiring

In order to maintain the transmitter and its accuracy, it is important to set the wiring and connection of the circuit to be within the accepted range. In AT1 analogue transmitter, there are several output signals. Be alert for the impedance that is caused by the circuit resistance as a result of electric output.

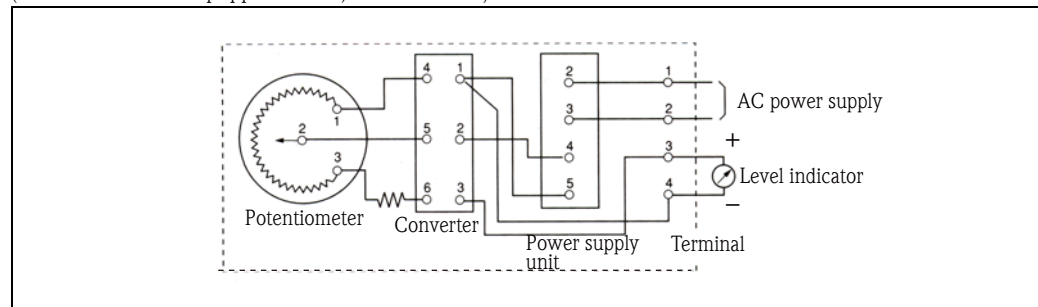
1. AC, 4 - 20mA or 10 - 50mA output

(For alarm contact equipped model, refer to 5 also)



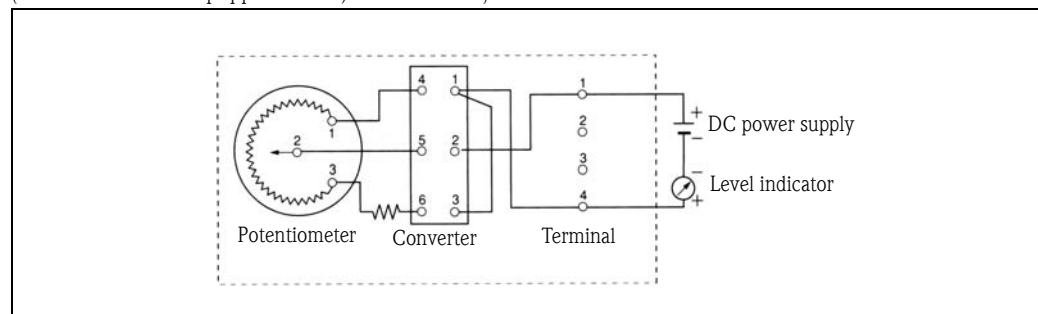
2. AC, 0 - 1mA, 0 - 20mA, 0 - 10mV, 0 - 1V output

(For alarm contact equipped model, refer to 5 also)



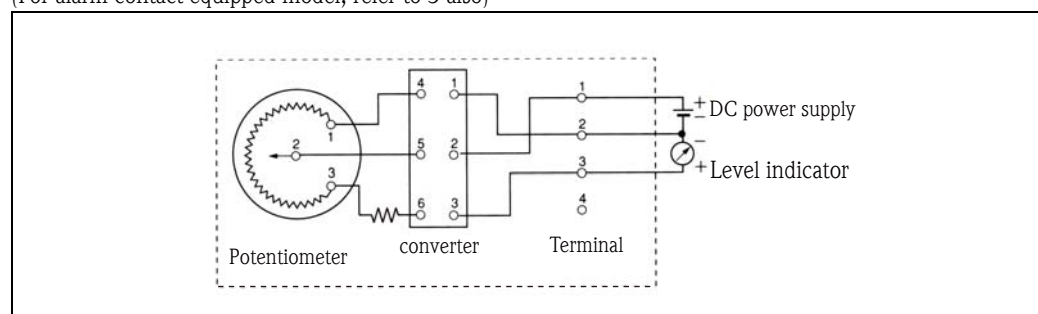
3. DC, 4 - 20mA or 10 - 50mA output

(For alarm contact equipped model, refer to 5 also)



4. DC, 0 - 1mA, 0 - 20mA, 0 - 10V, 0 - 1V output

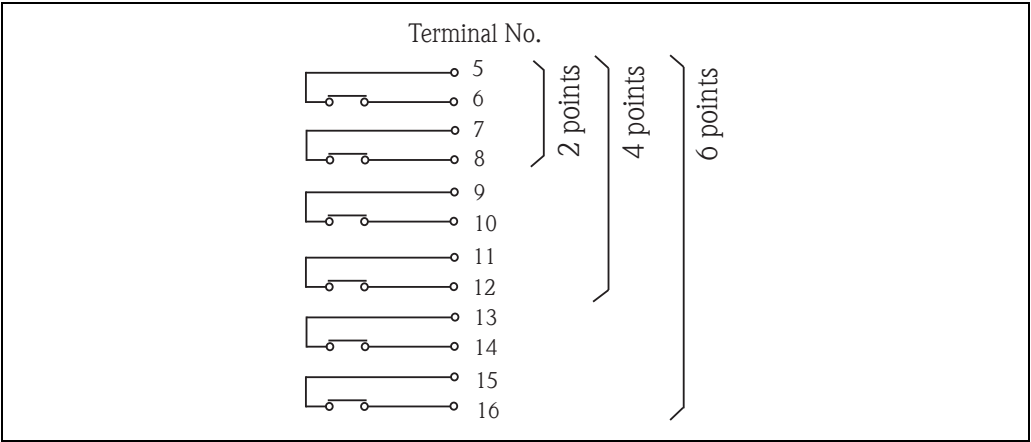
(For alarm contact equipped model, refer to 5 also)



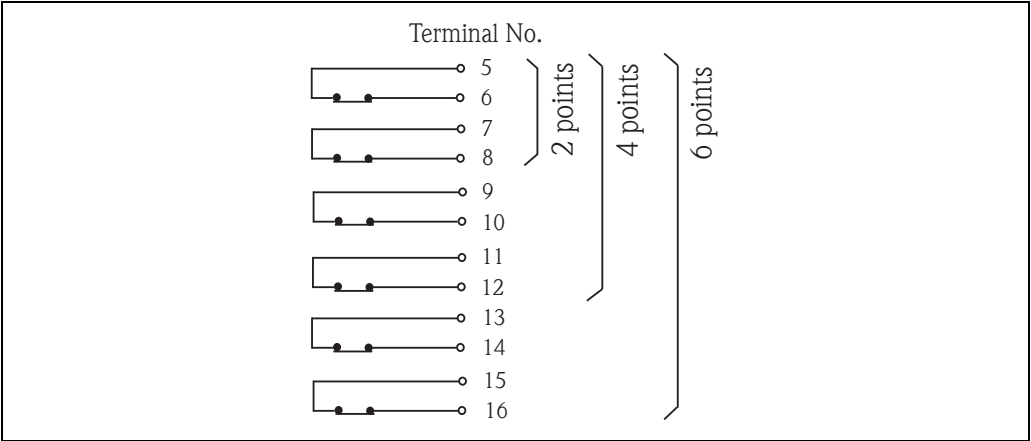
5. With Alarm contacts

In case of with contacts in 1, 2, 3, 4, please refer to following circuits.

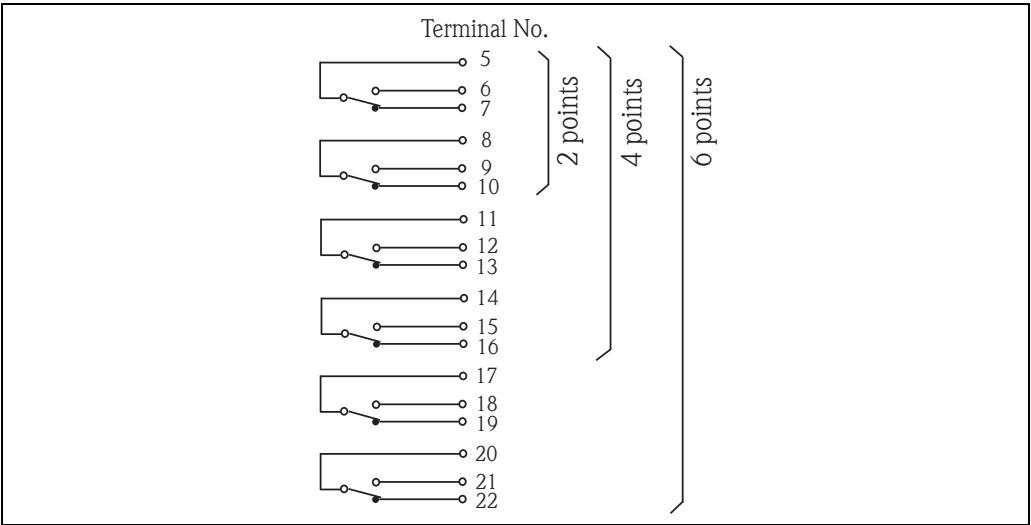
A contact (normal open)



B contact (normal close)



C contact (transfer contact)



5 Operation

5.1 Span Adjustment

Although point zero can not be changed, The location of 100% level can easily be changed.

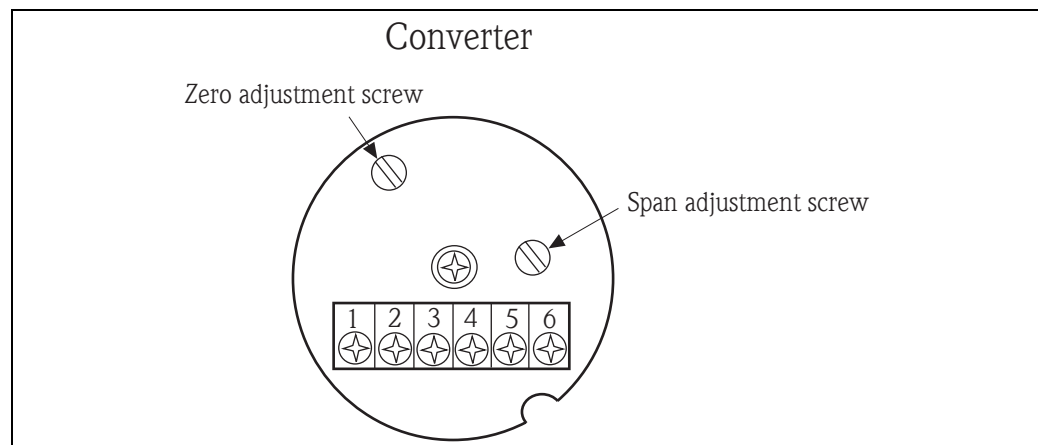
1. level change is available

- Take out the main body cover when the tank level reaches to the new 100% level that you like to change,
- Set the level indicator to 100% using the span adjustment screw on the converter.
- Close the main body cover

2. level change is not available

- take out transmitter from level gauge and remove the main body cover
- rotate the coupling to adjust the scale to the desired 100% level.
- set the level indicator to 100 %by using the span adjustment screw
- rotate the coupling again to match the transmitter's scale to the level gauge's scale.
- Close the main body cover and install to level gauge.

Range of span adjustment is between +0 % and -20% of the maximum value.



6 Maintenance

After adjusting for transmitter and receiver installation, there is no need to consider about operating procedure. Please check on AT1 periodically in accordance with following maintenance procedure.

Checking spot	Checking procedure	Countermeasure
Converter	Check for the discrepancy between the level at the transmitter (after the conversion) and the level at the tank gauge.	If there is any discrepancy, readjust the setting accordingly.
Alarm cam	Check alarm cam (switching point)	If switching point shifts from the right place, adjust the point again.
Alarm micro-switch	Check a contact performance.	Replace performance failure micro-switch.
Wiring and connected terminal	Check disconnection and connection terminal loose	

Repaires

The Endress+Hauser repair concept assumes that the measuring devices have a modular design and that customers are able to undertake repairs themselves. Spare parts are contained in suitable kits. They contain the related replacement instructions. All the spare parts kits which you can order from Endress+Hauser for repairs to the Analog Transmitter AT1 are listed with their order numbers on "7.1 Spare parts". Please contact Endress+Hauser Service for further information on service and spare parts.

Repaires to Ex-approved devices

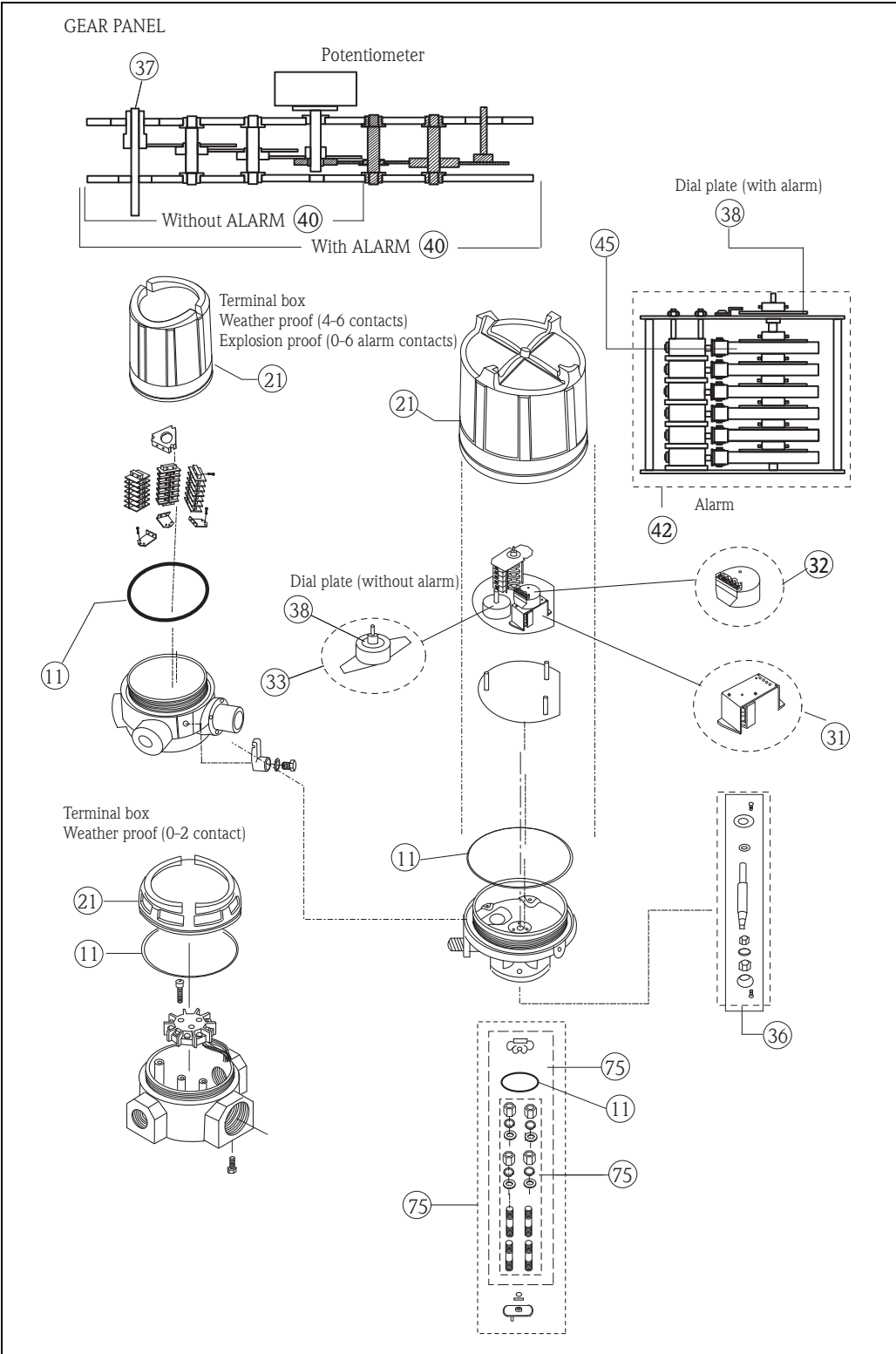
When carrying out repairs to Ex-approved devices, please note the following:

- Repairs to Ex-approved devices may only be carried out by trained personnel or by the Endress+Hauser Service.
- Comply with the prevailing standards, national Ex-area regulations and certificates.
- Only use original spare parts from Endress+Hauser.
- When ordering a spare part, please note the device designation on the nameplate. Only replace parts with identical parts.
- Carry out repairs according to the instructions. On completion of repairs, carry out the specified routine test on the device.
- Only Endress+Hauser Service may convert a certified device into a different certified variant.
- Document all repair work and conversions.

7 Troubleshooting

7.1 Spare parts

Spare parts are contained in kits. Spare parts which you can order from Endress+Hauser for the Transmitter are shown with their order numbers in the diagram below. For more information on service and spare parts, contact Endress+Hauser.



No.	Specification	No.	Specification
①① Oring, packing		③③ Electronic potentiometer	
017880-5025	O ring, Main body, NBR	017871-1202	Potentiometer, CPP45, LT, LTC2230/2240
017880-5026	O ring, Terminal box, small, NBR	56004470	Potentiometer, CPP45, ? LTC2110
017880-5027	O ring, El-compartment, large	③⑤ Terminal	
017871-1231	O ring, LT/transmitter coupling	56004497	Stud, terminal, Round type, AT1
②① Cover		③⑥ Main shaft	
017860-6323	Cover, terminal box, cover	017871-1210	main shaft assembly, AT1
017860-6326	Large-short cover, main body	③⑦ Input gear	
017860-6324	Cover, terminal box, large	017871-1211	Gear, d=11mm
③① Electronic power module		017871-1212	Gear, d=15mm
01781-1201	Power unit R/I AC100V	④⑤ Alarm cam	
56004475	Power unit R/I AC110V	017871-1220	Alarm cam
56004479	Power unit R/I AC200V	75 Accessory	
56004476	Power unit R/I AC220V	70106501	Stud bolt M10x40L, (spr. Washer+Washer) 4 sets
③② Electronic R/I converter		017871-1233	Coupling, transmitter, LT11/LT12
017871-1207	converter R/I DC power	017871-1232	Coupling, transmitter, LT14/LT16
56004478	converter R/I AC power		

39 Dial plate

XPN0001 Dial plate

030	Alarm Output:	
	0	Not used
	2	2 - point
	4	4 - point
	6	6 - point
080	Installation Gauge:	
	1	LT1100/LT1200/LT3100/LT3200 R:300mm low pressure LT version
	2	LT1400/LT1600/LT3400/LT3600 R:300mm high pressure LT version
	3	LTC2100 L:600mm
	4	LTC2230/LTC2240 R:600mm
090	Measuring Range:	
	A	1.5m
	1	2.5m
	C	3m
	D	3.5m
	E	4m
	2	5m
	F	6m
	G	8m
	3	10m
	H	12m
	J	14m
	4	16m
	5	20m
	K	25m
	6	30m
AT1-		Complete product designation

41 Gear train pannel

XPN0002 Gear Pannel Assembly

AT N0002 Gear Panel Assembly			
030	Alarm Output:		
	0	Not used	
	2	2 - point	
	4	4 - point	
	6	6 - point	
080	Installation Gauge:		
	1	LT1100/LT1200/LT3100/LT3200 R:300 low pressure LTversion	
	2	LT1400/LT1600/LT3400/LT3600 R:300 high pressure LTversion	
	3	LTC2100 L:600mm	
	4	LTC2230/LTC2240 R:600mm	
090	Measuring Range		
	A	1.5m	
	1	2.5m	
	C	3m	
	D	3.5m	
	E	4m	
	2	5m	
	F	6m	
	G	8m	
	3	10m	
	H	12m	
	J	14m	
	4	16m	
	5	20m	
	K	25m	
	6	30m	

AT1-				Complete product designation
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42 Alarm output assembly (Cam & Micro switch)

XPN0003 Alarm Assembly

030	Alarm Output:		
	2	2 - point	
	4	4 - point	
	6	6 - point	
080	Installation Gauge		
	1	LT1100/LT1200/LT3100/LT3200 R:300mm low pressure LTversion	
	2	LT1400/LT1600/LT3400/LT3600 R:300mm high pressure LTversion	
	3	LTC2100 L:600?	
	4	LTC2230/LTC2240 R:600?	
090	Measuring Range:		
	A	1.5m	
	1	2.5m	
	C	3m	
	D	3.5m	
	E	4m	
	2	5m	
	F	6m	
	G	8m	
	3	10m	
	H	12m	
	J	14m	
	4	16m	
	5	20m	
	K	25m	
	6	30m	

AT1-				Complete product designation
------	--	--	--	------------------------------

7.2 Troubleshooting

Error condition	Cause	Countermeasure
The display shows no change at all	1. Gear stabilizing screw is loose 2. Wires are broken or disconnection of wires at the terminal	1. Tighten the stabilizing screw and replace in case of press fitting fault 2. Inspect the wiring and the terminal connection and firmly connect the wires at the end
Display level is too high	1. Gear stabilizing screw is loose 2. Increase in resistance caused by friction in the potentiometer	1. Tighten the stabilizing screw and reset the level 2. Replace the potentiometer
Display level is too low	1. Gear stabilizing screw is loose	1. Tighten the stabilizing screw and reset the level
Alarm does not work or return	1. Stabilizing screw at alarm cam or scale is loose 2. Microswitch is not working properly 3. Wires are broken and Short circuit	1. Tighten the stabilizing screw and reset the level 2. Replace the microswitch 3. Redo wiring connection

7.3 Return

The following procedures must be carried out before a transmitter is sent to Endress+Hauser e.g. for repair or calibration:

- Remove all residue which may be present. Pay special attention to the gasket grooves and crevices where fluid may be present. This is especially important if the fluid is dangerous to health, e.g. corrosive, poisonous, carcinogenic, radioactive, etc.
- Always enclose a duly completed “Declaration of contamination” form (a copy of the “Declaration of contamination is included at the end of this operating manual). Only then can Endress+Hauser transport, examine and repair a returned device.
- Enclose special handling instructions if necessary, for example a safety data sheet as per EN 91/155/EEC.

Additionally specify:

- An exact description of the application.
- The chemical and physical characteristics of the product.
- A short description of the error that occurred (specify error code if possible)
- Operating time of the device.

7.4 Disposal

In case of disposal please separate the different components according to their material consistence.

7.5 Contact addresses of Endress+Hauser

The addresses of Endress+Hauser are given on the back cover of this operating manual. If you have any questions, please do not hesitate to contact your Endress+Hauser representative.

8 Technical data

Output	4 - 20mA, 10 - 50mA, 0 - 1mA, 0 - 20mA, 0 - 10mV, 0 - 1V
Accuracy	4 - 20mA, 10 - 50mA output : within $\pm 0.5\%$ 0 - 20mA, 0 - 10mV, 0 - 1V output : within $\pm 0.7\%$ 0 - 1mA output : within $\pm 1.5\%$
Power supply	24VDC (20 - 40VDC valid) AC100V/110V/220V/220V $\pm 10\%$, 50/60Hz
Power consumption	Approx. 5VA
Ambient temperature	Weather proof type : -20 ... +60 °C Flameproof type : -10 ... +40 °C (Accuracy coverage : 0 ... 40 °C)
Storage temperature	-20 ... +60 °C
Measuring range	0 - 1.5m, 2.5m, 3m, 3.5m, 4m, 5m, 6m, 8m, 10m, 12m, 14m, 16m, 20m, 25m, 30m
Hysteresis	Within 2% of measuring range
Cable entry	Flameproof with cable gland (B): PF(G)3/4 TF16-11, PF(G)1 TF22-15, PF(G)1-1/4 TF28-20 Flameproof (E): PF(G)3/4, PF(G)1-1/2 Weather proof (W): PF(G)3/4, PF(G)1-1/2, NPT3/4, NPT1, M25
Transmission line (per one contact)	DC : two or three lines AC : four lines
Alarm contacts	2, 4, 6 points, Microswitch (SPDT) Select any of the following contact : A contact (normal open) B contact (normal close) C contact (transfer)
Contact rating	Alarm 2 points: AC max. 220V, 4.2A Alarm 4 points: AC max. 220V, 2.8A Alarm 6 points: AC max. 220V, 2.8A (A,B contact), 2.2A(C contact)
Protection	Weather proof : IP65 Flame proof : d2G4
Colour	Silver
Weight	Weather proof : approx. 7kg Flame proof : approx. 13kg

Load impedance (maximum)

	Valtage Current	20VDC	24VDC	40VDC	100VAC 110VAC 200VAC 220VAC
Current output (max. impedance)	4 - 20mA	200Ω	400Ω	1100Ω	630Ω
	10 - 50mA	80Ω	160Ω	440Ω	250Ω
	0 - 1mA	18kΩ	22kΩ	38kΩ	25kΩ
	0 - 20mA	900Ω	1100Ω	1900Ω	1330Ω
Voltage output (min. impedance)	0 - 10mV	$\geq 500\Omega$			
	0 - 1V	$\geq 30k\Omega$			

Declaration of Hazardous Material and De-Contamination *Erklärung zur Kontamination und Reinigung*

RA No.

Please reference the Return Authorization Number (RA#), obtained from Endress+Hauser, on all paperwork and mark the RA# clearly on the outside of the box. If this procedure is not followed, it may result in the refusal of the package at our facility.
Bitte geben Sie die von E+H mitgeteilte Rücklieferungsnummer (RA#) auf allen Lieferpapieren an und vermerken Sie diese auch außen auf der Verpackung. Nichtbeachtung dieser Anweisung führt zur Ablehnung ihrer Lieferung.

Because of legal regulations and for the safety of our employees and operating equipment, we need the "Declaration of Hazardous Material and De-Contamination", with your signature, before your order can be handled. Please make absolutely sure to attach it to the outside of the packaging.

Aufgrund der gesetzlichen Vorschriften und zum Schutz unserer Mitarbeiter und Betriebseinrichtungen, benötigen wir die unterschriebene "Erklärung zur Kontamination und Reinigung", bevor Ihr Auftrag bearbeitet werden kann. Bringen Sie diese unbedingt außen an der Verpackung an.

Type of instrument / sensor

Geräte-/Sensortyp _____

Serial number

Seriennummer _____

☐ **Used as SIL device in a Safety Instrumented System / Einsatz als SIL Gerät in Schutzeinrichtungen**

Process data/ Prozessdaten

Temperature / Temperatur _____ [°F] _____ [°C]

Pressure / Druck _____ [psi] _____ [Pa]

Conductivity / Leitfähigkeit _____ [µS/cm]

Viscosity / Viskosität _____ [cp] _____ [mm²/s]

Medium and warnings

Warnhinweise zum Medium



	Medium /concentration <i>Medium /Konzentration</i>	Identification CAS No.	flammable <i>entzündlich</i>	toxic <i>giftig</i>	corrosive <i>ätzend</i>	harmful/ irritant <i>gesundheitsschädlich/ reizend</i>	other * <i>sonstiges *</i>	harmless <i>unbedenklich</i>
Process medium <i>Medium im Prozess</i>								
Medium for process cleaning <i>Medium zur Prozessreinigung</i>								
Returned part cleaned with <i>Medium zur Endreinigung</i>								

* explosive; oxidising; dangerous for the environment; biological risk; radioactive

* explosiv; brandfördernd; umweltgefährlich; biogefährlich; radioaktiv

Please tick should one of the above be applicable, include safety data sheet and, if necessary, special handling instructions.

Zutreffendes ankreuzen; trifft einer der Warnhinweise zu, Sicherheitsdatenblatt und ggf. spezielle Handhabungsvorschriften beilegen.

Description of failure / Fehlerbeschreibung _____

Company data / Angaben zum Absender

Company / Firma _____	Phone number of contact person / Telefon-Nr. Ansprechpartner: _____
Address / Adresse _____	Fax / E-Mail _____
_____	Your order No. / Ihre Auftragsnr. _____

"We hereby certify that this declaration is filled out truthfully and completely to the best of our knowledge. We further certify that the returned parts have been carefully cleaned. To the best of our knowledge they are free of any residues in dangerous quantities."

"Wir bestätigen, die vorliegende Erklärung nach unserem besten Wissen wahrheitsgetreu und vollständig ausgefüllt zu haben. Wir bestätigen weiter, dass die zurückgesandten Teile sorgfältig gereinigt wurden und nach unserem besten Wissen frei von Rückständen in gefährlichen Mengen sind."

(place, date / Ort, Datum)

Name, dept./ Abt. (please print / bitte Druckschrift)

Signature / Unterschrift

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